

Botulism (food-borne botulism, infant botulism)

What is botulism?

Botulism is a serious illness caused by a nerve toxin made by the bacterium, *Clostridium botulinum*. (A toxin is a poison that is released by some bacteria and viruses). There are three types of botulism: food, wound and infant botulism. Eating food that has the botulism toxin causes food-borne botulism. It often involves improperly processed home canned foods. Botulism in infants under one year of age has been associated with the intake of contaminated honey. Wound botulism occurs when *Clostridium botulinum* spores contaminate a wound and produce toxin.

Can botulism be used as a bioterrorism threat?

In the event of a bioterrorism event, people intentionally exposed who breathe in the toxin or eat the toxin in contaminated food or water might develop the illness. No information is available on the effects of breathing in the botulinum toxin but it may be similar to the food-borne illness.

How is it spread?

A person must eat contaminated food that has not been properly canned, cooked or reheated after the bacteria have produced the toxin. **Person-to-person spread does not occur.**

What are the symptoms?

Food-borne and infant botulism produce symptoms that affect the nervous system. The classic symptoms of botulism include double vision, blurred vision, drooping eyelids, slurred speech, difficulty swallowing, dry mouth and muscle weakness that goes down the body, first the shoulders, then upper arms, lower arms, thighs, calves, feet. If untreated these symptoms may progress to paralysis. Infants with botulism appear lethargic, feed poorly, are constipated, and have a weak cry and poor muscle tone.

How soon after exposure would symptoms develop?

Symptoms generally begin 12-36 hours after eating contaminated food, but may occur as early as a few hours and as late as 10 days.

Can I spread this to my family?

No, this cannot be spread from person to person.

What is the treatment?

The symptoms of botulism make hospitalization necessary. If diagnosed early, food-borne and wound botulism can be treated with an antitoxin, which blocks the action of the toxin circulating in the blood. This can prevent patients from worsening, but recovery still takes many weeks. If left untreated, a patient may need to be on a breathing machine (ventilator) for weeks and would require intensive medical and nursing care. Currently antitoxin is not usually given in cases of infant botulism.

If I develop symptoms, what do I do?

If you should develop any of the symptoms above, please contact your physician or your local hospital immediately for evaluation. Please keep any contaminated food for testing.

Can botulism be prevented?

All canned and preserved foods should be properly processed and prepared. Bulging containers should not be opened and foods with an unusual smell should not be eaten or even tasted. Canned food with bulging lids should be thrown away. Identified sources of infant botulism, such as honey, should not be fed to infants.

Where can I get additional information?

For additional information contact the Centers for Disease Control (CDC) and Prevention public response hotline:

- English (888) 246-2675
- Espanol (888) 246-2857
- TTY (866) 874-2646

Or, go to the CDC Web site: <http://www.bt.cdc.gov/agent/botulism/index.asp>.

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